National Aeronautics and Space Administration

A Look at NASA

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NASA Weekly Update

Week of April 9 – 16, 2007

April 10: NASA Targets June Launch For Space Shuttle Atlantis: NASA is targeting June 8 as the next possible launch opportunity for space shuttle Atlantis' STS-117 mission to the International Space Station.

In Kennedy's Vehicle Assembly Building, technicians point to markers showing the hail damage being repaired on the external tank of Space Shuttle Atlantis.

Managers decided to finish repairs to Atlantis' current tank and use it for STS-117. The tank that arrived Friday will be prepared for space shuttle Endeavour's STS-118 mission to the space station and now is targeted for launch in August. For more information about the STS-117 crew and mission, visit: http://www.nasa.gov/shuttle.

April 16: Registration Opens for JSC, Sally Ride Science STS-118 Workshop: Educators can get involved in STS-118, the first flight of an educator astronaut, by registering for the first in a series of Educator Institutes offered by Northrop Grumman and Sally Ride Science in collaboration with NASA. The first one-day professional development program for upper elementary and middle school science teachers will be held April 21 at NASA's Johnson Space Center in Houston. The second Educator Institute will be held May 5 at NASA's Jet Propulsion Laboratory in Pasadena, Calif. To register for the Educator Institute at JSC and for more information, visit: http://www.sallyrideeducators.com/.

April 11: NOAA, NASA Restore Climate Sensor to Upcoming NPP Satellite: NASA and NOAA Wednesday announced a plan to restore a key ozone layer climate sensor to the National Polar-orbiting Operational Environmental Satellite System (NPOESS) program. The Ozone Mapping and Profiler Suite (OMPS) Limb will be returned to NPOESS Preparatory Project (NPP) satellite set to launch in 2009.

April 13: Report Reveals Likely Causes of Mars Spacecraft Loss: After studying Mars four times as long as originally planned, NASA's Mars Global Surveyor orbiter appears to have succumbed to battery failure caused by a complex sequence of events involving the onboard computer memory and ground commands. Mars Global Surveyor last communicated with Earth on Nov. 2, 2006. Within 11 hours, depleted batteries likely left the spacecraft unable to control its orientation. Information about the Mars Global Surveyor mission, including the preliminary report from the process review board and a list of some important discoveries by the mission, is available on the Internet at: http://www.nasa.gov/mission_pages/mgs.

April 11: NASA Aims to Clear Up Mystery of Elusive Clouds at Edge of Space: NASA is preparing to launch the Aeronomy of Ice in the Mesosphere (AIM) spacecraft, the first mission dedicated to exploration of mysterious ice clouds that dot the edge of space in Earth's polar regions. These clouds have grown brighter and more prevalent in recent years and some scientists suggest that changes in these clouds may be the result of climate change. AIM will conduct the first detailed probe of this unusual phenomenon typically observed approximately 50 miles above the Earth's surface in the mesosphere. The mesosphere is the region just above the stratosphere. For more information about NASA and the AIM mission, visit: http://www.nasa.gov/aim.

April 12: NASA Engineer Helps Train Puppy for Future Leadership Role: One of NASA's newest workers is a top dog? Lterally. A golden retriever puppy named Aries goes to work every day at NASA's Langley Research Center in Hampton, Va. as part of the "Leader Dogs for the Blind" program. Her mentor is structural engineer Evan J. Horowitz. Video and interviews are available on the NASA TV Video File. For more information and satellite coordinates visit: www.nasa.gov/ntv. For more information about Leader Dogs for the Blind, visit: http://www.leaderdog.org.

April 12: NASA Awards Contract for "Green" Exploration Sciences Building: NASA has awarded a contract to Manhattan Construction Company of Fairfax, Va., for the construction of the Exploration Sciences Building at NASA's Goddard Space Flight Center in Greenbelt, Md. The firm fixed price for the basic requirement is approximately $54 million; the price for the options is approximately $1.2 million; with an approximate total price of $56 million if all options are exercised.

April 9: NASA Extends Contract with Russia's Federal Space Agency: NASA has signed a $719 million modification to the current International Space Station contract with Russia's Federal Space Agency in Moscow for crew and cargo services through 2011. The firm-fixed price extension covers crew rotations for 15 crew members, six in 2009, six in 2010 and three in 2011, delivery and the removal of 5.6 metric tons of cargo. U.S. Commercial Orbital Transportation Services (COTS) are still planned to provide the bulk of cargo transportation needs from 2010 and beyond to the space station.

Weekly Status Reports

Space Shuttle

Atlantis
Mission: STS-117 - 21st International Space Station Flight (13A) - S3/S4 Truss Segment Solar Arrays
Vehicle: Atlantis (OV-104)
Location: Vehicle Assembly Building
Launch Date: Targeted for June 8, 2007
Launch Pad: 39A
Crew: Sturckow, Archambault, Reilly, Swanson, Forrester and Olivas
Inclination/Orbit Altitude: 51.6 degrees/122 nautical miles

Endeavor
Mission: STS-118 - 22nd International Space Station Flight (13A.1) - S5 Truss Segment
Vehicle: Endeavour (OV-105)
Location: Orbiter Processing Facility Bay 2
Launch Date: Targeted for August 2007
Launch Pad: 39A
Crew: Kelly, Hobaugh, Williams, Morgan, Mastracchio, Caldwell and Anderson
Inclination/Orbit Altitude: 51.6 degrees/122 nautical miles

Discovery
Mission: STS-122 - 24th International Space Station Flight (1E) - Columbus Laboratory
Vehicle: Discovery (OV-103)
Location: Orbiter Processing Facility Bay 3
Launch Date: Targeted for Fall 2007
Launch Pad: 39A
Crew: Frick, Poindexter, Walheim, Love, Melvin, Schlegel and Eyharts
Inclination/Orbit Altitude: 51.6 degrees/122 nautical miles

Upcoming Events

- **April 18:** Landing of the Expedition 14 crew at Kazakhstan's Baikonur Cosmodrome. The crew includes Commander Michael Lopez-Alegria, Flight Engineer Mikhail Tyurin, and Flight Engineer Sunita Williams.
- **April 21:** Near Field Infrared Experiment (NFIRE) launch from NASA Wallops Flight Facility on an Orbital Sciences Minotaur-1 vehicle.
- **April 25:** Aeronomy of Ice in the Mesosphere (AIM) launch from Vandenberg Air Force Base on an Orbital Sciences Pegasus XL vehicle.
- **June 8:** Launch of Space Shuttle Atlantis from Kennedy Space Center for mission STS-117 to the International Space Station.
- **June 30:** Dawn launch from Cape Canaveral Air Force Station on a Delta II rocket.
- **Targeted for August:** Launch of Space Shuttle Endeavor from Kennedy Space Center for mission STS-118 to the International Space Station.

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